

AMENDMENTS

Please cancel claim 19 and enter the following amendments and new claims:

Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) A medical device comprising a generally longitudinally-extending wire core, a portion of said core more adjacent the distal end thereof than the proximal end thereof being wound to form a helical coil which tapers in diameter from a larger diameter end at the proximal end thereof to a smaller diameter end at the distal end thereof, at least the portion of said core forming said helical coil being made of super-elastic deformable material.

Claims 2. – 13. (canceled)

14. (original) The medical device of claim 1, wherein said core comprises a super-elastic deformable material.

15. (original) The device of claim 1, wherein said super-elastic deformable material is an alloy comprising nickel and titanium.

16. (original) The device of claim 15, wherein the alloy consists of nickel, titanium, and chromium.

17. (canceled)

18. (original) A medical device comprising:

a guidewire including a longitudinally-extending wire core, a portion of said core more adjacent the distal end thereof than the proximal end thereof being wound to form a

helical coil which tapers in diameter from a larger diameter end at the proximal end thereof to a smaller diameter end at the distal end thereof, at least the portion of said core forming said helical coil being made of a super-elastic deformable material; and

a flexible tubular sheath surrounding a portion of and being movable axially relative to said guidewire,

the sheath having an inner diameter that is greater than the diameter of the guidewire other than a portion of said guidewire forming said helical coil, such that said coil deforms into a configuration having a maximum diameter not more than the inner diameter of said sheath upon retraction into the sheath and returns to a coil configuration having a maximum diameter greater than the outer diameter of said sheath upon withdrawal from the sheath.

19. (canceled)

20. (original) A medical procedure comprising the steps of:

providing a medical device according to claim 18 in a configuration in which the helical coil of the guide wire of said device is retracted into the tubular sheath of said device;

introducing the device in said configuration into a desired pathway within a body;

positioning the device in a desired location within said pathway;

moving the helical coil portion of the guidewire relative to the sheath such that the helical coil portion of the guide wire is withdrawn from the sheath and returns to a coil configuration and in which the coil engages the inner surface of the pathway.

21. (original) The procedure of claim 20, wherein a biological calculus is within said pathway and said procedure includes fragmentation of the calculus, including the steps of:

locating the biological calculus within the pathway;

placing at least a portion of the sheathed guidewire beyond the location of the calculus; and

moving the guidewire relative to the sheath such that the helical coil portion thereof is exposed from the distal end of the sheath and reforms into a helical coil configuration distally of the calculus.

22. (original) The procedure of claim 20, wherein the procedure further comprises the step of fragmenting a biological calculus located in a desired location in said pathway and distally to the coil that has engaged the inner surface of the pathway, using lithotripsy.

23. (original) The procedure of claim 22, wherein the lithotripsy comprises one of electrohydraulic, pneumatic pulse, acoustic shock wave, and laser lithotripsy.

24. (original) The medical device of claim 1, wherein at least a portion of the device includes a layer of radiopaque material.

25. (original) The medical device of claim 24, wherein the radiopaque material comprises gold, platinum, tantalum, tungsten, iridium, rhodium, rhenium, or an alloy of two or more radiopaque materials.

26. (original) The medical device of claim 18, wherein at least a portion of the flexible tubular sheath comprises a layer of a radiopaque material.

27. (original) The medical device of claim 26, wherein the radiopaque material comprises gold, platinum, tantalum, tungsten, iridium, rhodium, rhenium, or an alloy of two or more radiopaque materials.

28. (canceled)

29. (new) The medical device of claim 1, wherein a layer of a polymeric material substantially covers at least the portion of said core forming said helical coil.

30. (new) The medical device of claim 29, wherein a layer of a polymeric material substantially covers the outer surface of the wire core.
31. (new) The medical device of claim 29, wherein the polymeric material comprises a fluorinated polymer.
- 32, (new) The medical device of claim 4, wherein the fluorinated polymer is polytetrafluoroethylene.
33. (new) The medical device of claim 1, wherein the wire core is about 50 cm to about 250 cm long.
34. (new) The medical device of claim 33, wherein the wire core is about 140 cm to about 220 cm long.
35. (new) The medical device of claim 1 or 30, wherein the wire core is about 0.015 inches (0.381 mm) to about 0.04 inches (1.016 mm) in width.
36. (new) The medical device of claim 1 or 30, wherein the proximal end of the helical coil has a diameter of about 0.2 cm to about 3.0 cm.
37. (new) The medical device of claim 36, wherein the proximal end of the helical coil has a diameter of about 0.5 cm to about 1.5 cm.
38. (new) The medical device of claim 37, wherein the proximal end of the helical coil has a diameter of about 0.7 cm to about 0.8 cm.
39. (new) The medical device of claim 1, wherein the helical coil comprises between about 5 turns and about 15 turns.

40. (new) The medical device of claim 1, wherein the distal end of the helical coil is about 2 cm to about 50 cm from the distal end of the device.
41. (new) The medical device of claim 40, wherein the distal end of the helical coil is about 10 cm to about 24 cm from the distal end of the device.
42. (new) The medical device of claim 18, wherein a layer of a polymeric material substantially covers at least the portion of said core forming said helical coil.
43. (new) The medical device of claim 42, wherein a layer of a polymeric material substantially covers the outer surface of the wire core.
44. (new) The medical device of claim 42, wherein the polymeric material comprises a fluorinated polymer.
45. (new) The medical device of claim 44, wherein the fluorinated polymer is polytetrafluoroethylene.
46. (new) The device of claim 18, wherein said super-elastic deformable material is an alloy comprising nickel and titanium.
47. (new) The device of claim 46, wherein the alloy consists essentially of nickel, titanium, and chromium.
48. (new) The medical device of claim 18, wherein the wire core is about 50 cm to about 250 cm long.
49. (new) The medical device of claim 48, wherein the wire core is about 140 cm to about 220 cm long.

50. (new) The medical device of claim 18 or 42, wherein the wire core is about 0.015 inches (0.381 mm) to about 0.04 inches (1.016 mm) in width.

51. (new) The medical device of claim 18 or 42, wherein the proximal end of the helical coil has a diameter of about 0.2 cm to about 3.0 cm.

52. (new) The medical device of claim 51, wherein the proximal end of the helical coil has a diameter of about 0.5 cm to about 1.5 cm.

53. (new) The medical device of claim 52, wherein the proximal end of the helical coil has a diameter of about 0.7 cm to about 0.8 cm.

54. (new) The medical device of claim 18, wherein the helical coil comprises between about 5 turns and about 15 turns.

55. (new) The medical device of claim 18, wherein the distal end of the helical coil is about 2 cm to about 50 cm from the distal end of the device.

56. (new) The medical device of claim 55, wherein the distal end of the helical coil is about 10 cm to about 24 cm from the distal end of the device.

57. (new) The medical device of claim 18, wherein at least a portion of the flexible tubular sheath comprises a layer of a radiopaque material.

58. (new) The medical device of claim 57, wherein the radiopaque material comprises gold, platinum, tantalum, tungsten, iridium, rhodium, rhenium, or an alloy of two or more radiopaque material.

59. (new) The medical device of claim 18, wherein a portion of the coil is covered with a radiopaque material.

60. (new) The medical device of claim 57, wherein the flexible tubular sheath is covered at its distal portion with a radiopaque material.

61. (new) The medical device of claim 18, wherein the coil portion of the guidewire fits into the flexible tubular sheath having an inner diameter about 0.005 inches (0.127 mm) greater than the coil portion of the guidewire.